





Railroad Commission of Texas

Statewide Rule 101 and Form ST-1

August 5, 2021

The meeting will begin shortly.























Statewide Rule 101 and Form ST-1

James Harcourt, P.G., Bryce McKee P.G., Heather Hesskew, Kaila Thomas, CPA

August 2021















Power Point Presentation



This presentation is available for download from the RRC website at:

https://www.rrc.texas.gov/oil-and-gas/workshops-and-conferences/rrc-regulatory-webinars/regulatory-webinars-2021-schedule/

Overview



- Who we are
- What has been accomplished this year
- What is High Cost Gas Incentive and Statewide Rule (SWR) 101?
- How to Obtain Certification of High Cost Gas Production
 - Part I Area Designation Application
 - Part II Individual Well Certification (Form ST-1)

Who We Are



Oil & Gas Division

- Technical Permitting
 - Groundwater Advisory Unit (GAU)
 - Injection Permitting and Support
 - Environmental Permits and Support
 - Engineering Unit
- Note: processing of the ST-1 Application moved from the Engineering Unit to the Groundwater Advisory Unit in November 2019.

Who is the GAU? (1 of 2)



- A licensed Geologist Manager and three Group Leads
 - 10 licensed Geologists and 4.6 Administrative staff

 Rule 101 Area Designations and ST-1 Application

- Groundwater Determinations
 - Base of Usable Quality Water (BUQW)
 - Underground Source of Drinking Water (USDW)

Who is the GAU? (2 of 2)



- Special Projects
 - Aquifer Exemption (AE) project
 - State Wide Complex Geology and Aquifer Mapping
 - Anything and everything else the Commission requires

GAU Tools and Techniques



- The GAU primarily uses Geographical Information Systems (GIS)
 - Operator Provided Information
 - Other Government and NGO Web Resources
 - Legacy Cloth Maps and Well Files

Self Generated Data and full time GIS Specialist & Licensed Geologist



What is a High Cost Gas Incentive?



- Texas Tax Code 201.057(C) Gas Production Tax,
 Determining Value
 - Texas Administrative Code 16 TAC Part 1, §3.101

- Eligible high-cost gas is entitled to a reduction of the severance tax imposed for the first 10 years of production,
- OR
 - until the cumulative value of tax reduction equals 50 percent of drilling and completion costs, whichever occurs first.

Statewide Rule 101



High Cost Gas is defined in SWR 101 as natural gas which the Commission finds to be:

- Produced from designated tight formations
- Produced as a result of production enhancement work
- Devonian shale
- Any gas well completion deeper than 15,000 feet True Vertical Depth (TVD)
- Produced from geopressured brine
- Occluded natural gas produced from coal seams

Area Designations



- To qualify as a tight gas formation:
 - The *in-situ* (pre-stimulation) permeability (K)
 throughout the proposed formation is **0.1 millidarcies** (md) or less
 - The geometric mean or median pre-stimulation stabilized production rate against atmospheric pressure (Q) for all wells does not exceed the rate in listed in the yardstick table within SWR 101 (next slide).
 - No well drilled into the formation is expected to produce, without stimulation, more than 5 bbls crude oil per day.

Production Rate Yardstick Table



Top of Formation		Maximum Allowable	Top of Formation Average Depth Range (ft)		Maximum Allowable Production Rate (MCF/D)
Average Depth Range (ft)		Production Rate (MCF/D)			
0	1,000	44	8,000	8,500	388
1,000	1,500	51	8,500	9,000	449
1,500	2,000	59	9,000	9,500	519
2,000	2,500	68	9,500	10,000	600
2,500	3,000	79	10,000	10,500	693
3,000	3,500	91	10,500	11,000	802
3,500	4,000	105	11,000	11,500	927
4,000	4,500	122	11,500	12,000	1,071
4,500	5,000	141	12,000	12,500	1,238
5,000	5,500	163	12,500	13,000	1,432
5,500	6,000	188	13,000	13,500	1,655
6,000	6,500	217	13,500	14,000	1,913
6,500	7,000	251	14,000	14,500	2,212
7,000	7,500	290	14,500	and deeper	2,557
7,500	8,000	336			1

Area Designation Rule Requirements



• SWR 3.101 (f)(1) If ... an **ST-1** is based on a tight formation certification and the well is not located within a geographical area that has been previously certified... the operator shall first apply for a tight formation area designation

Catalog of Existing Approved Tight Formations
 https://www.rrc.texas.gov/oil-and-gas/publications-and-notices/publications/oil-and-gas-statewide-rule-101-tight-gas/

• SWR 3.101 (f)(2) ... Submit a written request to the High-Cost Gas Severance Tax Section... (Forms and Format is undefined... there is no standardized application "form")

Area Designation Exhibits



- General Exhibits
 - Area Map, Notice of Application, etc.

- Geologic Exhibits
 - Structure Map, Logs, Description, etc.

- Engineering Exhibits
 - Table of Data, Calculations, etc.

Area Designation Notice of Application

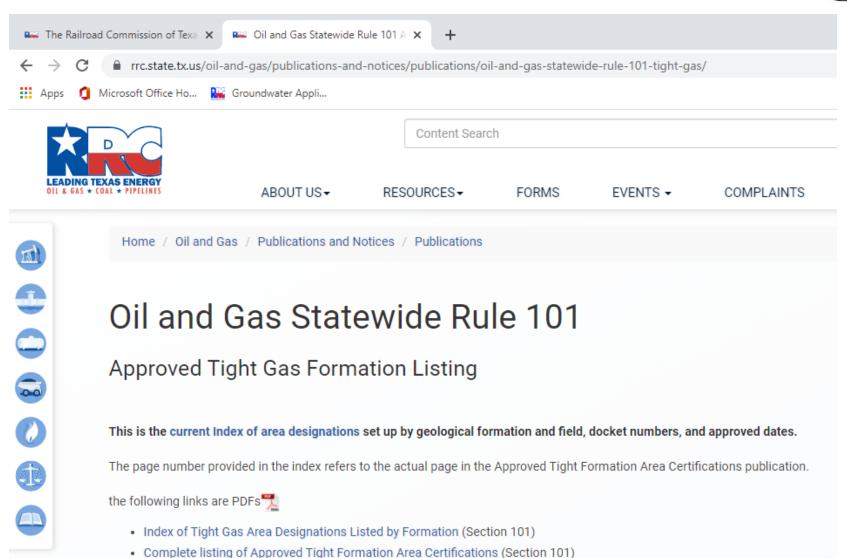


Notice of Application:

- Notify all operators in all fields as listed on the proration schedule no more than a month prior to the application
- Application may not be granted prior to 21 day protest period
- Form can be found at: https://www.rrc.state.tx.us/oil-and-gas-gas/publications-and-notices/publications/oil-and-gas-statewide-rule-101-tight-gas/
- This notification lists formation, field(s), surveys, and means of protesting the application and should include a map of the proposed Tight Gas Area Designation

SWR101 Tight Gas Web-Page

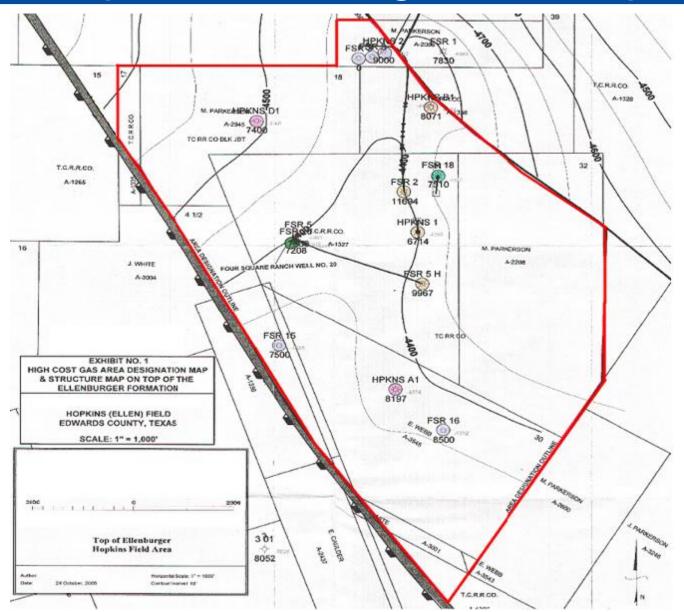




· Notice of Application for the Designation of a Tight Gas Formation (Section 101)

Example Area Designation Map





Area Designations – Area Map (1 of 2)

 SWR 101 does not strictly define the shape or size that an Area must take...there is great flexibility in the outline of the proposed Area.

- Please keep in mind:
 - All parts of the Area must be within a 2 ½ mile radius of a data point well
 - All wells that have been tested or completed in the proposed formation must be included in the analysis

Area Designations – Area Map (2 of 2)

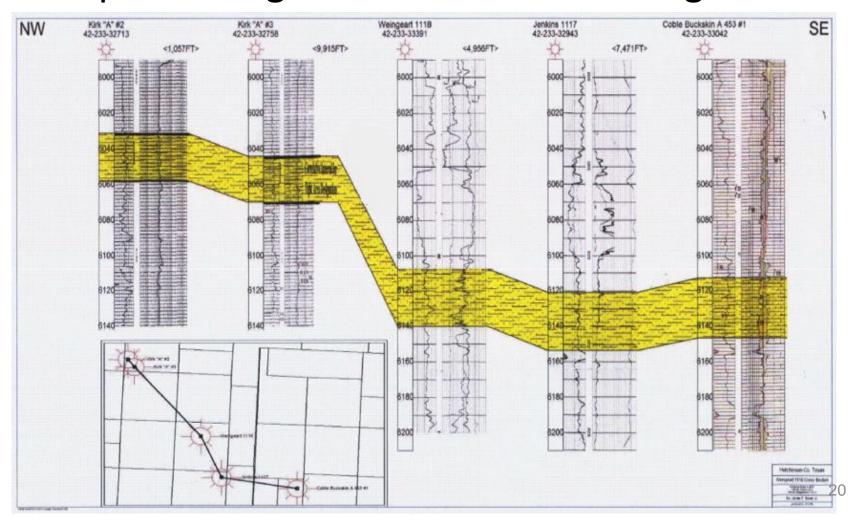
- Any sections of non-contiguous acreage must qualify on their own with respect to the permeability and flow rate requirements of SWR (101)
- Any non-contiguous acreage cannot be more than 2½ miles apart
- All data points must be located within the proposed area

 Potential data point wells cannot be excluded from the application by a "window"

Example Cross-section



Submit with Application to Show Requested Tight-Gas Interval for Designation

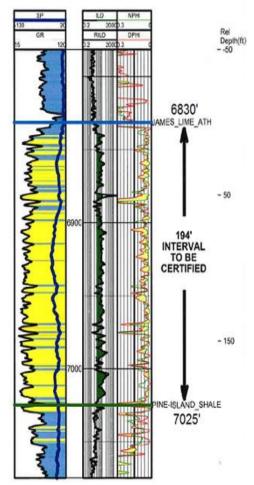


Include a Type Log



- Identify the well
- Show and Label Top and Base of proposed tight interval
- Include a large enough portion of log to show important markers
- The log must be legible and interpretable by all potential future users.
- This type log is what the RRC technical reviewer (and the operators applying for ST-1s) will use when defining the Area Designations.





Engineering Calculations (1 of 2)



 If any wells that penetrate the proposed tight interval are not included in the analysis, please provide an explanation

 All data points must be completed within the proposed tight interval

 Demonstrate that no well drilled into the formation is expected to produce, without stimulation, more than 5 bbls crude oil per day

Engineering Calculations (2 of 2)



- Identify the method you used to determine the permeability and production rate for each data point well, e.g. RTA, ONEPT, PROMAT, core data, etc.
 - Is the data pre-fracture stimulation or post?
 - Explain how the assumptions/variables used in the calculations were obtained, e.g. skin, porosity, thickness, etc.
 - Provide a copy of the calculations / modeling reports for permeability and flow rate for each data point well.

Completing the Area Designation Process



- If the application is complete:
 - The docket will be scheduled for the next available Railroad Commissioners' Conference
 - Staff's deadline for posting items to the Agenda is generally 2 weeks prior to the conference.
 - After the Commissioners sign the Master Order, the drafted Area Designation Final Order will be emailed to the applicant
 - If the Tight Gas Area Designation cannot be administratively approved, the Applicant can appeal the decision by requesting a Hearing.

Form ST-1: Individual Well Certifications Form (1 of 2)



- Things to Consider Before Filing an ST-1 Application:
 - When you submit an ST-1 Online Application it is assigned a Docket Number and Received Date Stamp

 If the well is not located within an existing Area Designation, an Area Designation application must be applied for prior to submitting an application for certification of an individual well (Form ST-1)

Individual Well Certifications Form (2 of 2)



Form ST-1

 Things to Consider Before Filing an Application:

 ST-1's will be Denied if the Area Designation is denied, withdrawn, or dismissed

 You can check to see if a pre-existing severance tax exemption has been granted to your Gas ID / Lease ID by visiting the 'Texas Comptroller's Office website https://mycpa.cpa.state.tx.us/cong

Correlation



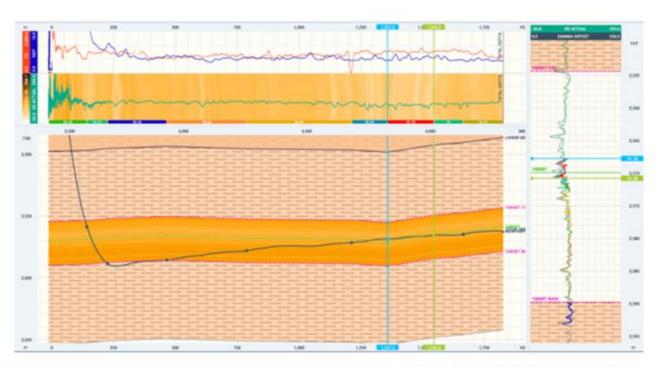
ST-1 Applications and Area Designations

- Is the well completed within the correlative tight interval?
 - Provide correlation log with sufficient coverage to identify formations/markers above and/or below tight interval; for horizontal wells a screenshot of the "as-drilled" geosteering vertical section can be used.
 - No Log is required for Barnett Shale applications
 - For less common or geologically complex Areas/Formations, a cross-section correlated to the designated tight interval on type log may be helpful.

Geosteering "As Drilled" Cross-Section

Showing Wellbore in the Tight-Gas Area Designation Interval

(The RRC technical reviewer uses this log display to confirm that your wellbore is within the correlative interval of the Area Designation)



Although not required, having this Attachment in the ST-1 Application greatly expedites the technical review process.

Correlation



ST-1 Applications and Area Designations

- Is the well located within the designated correlative tight area?
 - Provide a copy of the map used to designate the area
 - Show the location of the well in that area
 - If the designated area for your ST-1 has been approved for an entire county, no map is required (most Barnett Shale, Haynesville, and some Eagleford Area Designations)

Form ST-1 Data Requirements



'Tight' Gas Well Application Procedure SWR 101 (d):

 "... and any additional information deemed necessary by the Commission to clarify, explain and support the required attachments..."

Form ST-1 Tight Gas Severance Tax



Incentive Certifications for Individual Wells

- Things to Be Aware of:
 - A Hearing may be requested if for some reason your ST-1 Application is denied or if only a portion of the completion interval is given a severance tax incentive...(partial credit)
 - In cases where a partial tax credit is determined, the amount of the allowable tax credit will be given in terms of a percentage.

EXAMPLE



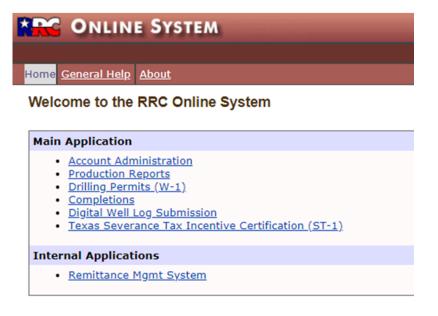
"58 percent has been determined eligible by the Railroad Commission for the above referenced well."

(Tight Gas Producing Interval / Total Producing Interval) × 100%

Current Implementation

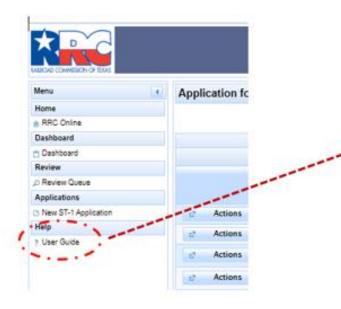


- Paper Submissions ended in midyear 2019
- ST-1 filings are only accepted through the RRC Online System.
- If you don't have the link talk to your organization's Online Administrator
- RRC Account Administration can be reached at 512-463-7229



ST-1 Online: All You Need to Know







Application for Texas
Severance Tax Incentive
Certification (ST-1)

User Guide

38 Page Users Guide with screen shots and annotations

Accessible at all times on the bottom right pane

Call the GAU if you have questions: (512)463-2741

Table of Contents

Additional Help



Filtering Search Results

After getting the results of your application or operator search, you can filter the results to show the information that you want to specify.



Click the text boxes under the column names and enter a full or partial word to filter the application list by strings that only contain the string you entered in the text box.

For example, if you enter "submitted" in the Filing Status text box, only results that have an application status of Submitted are displayed. Removing the text removes the filter and returns the list to its initial state.



NOTE: Filing status can be determined in any application list by looking at the Filing Status column in the list.

Online ST-1 Application Dashboard



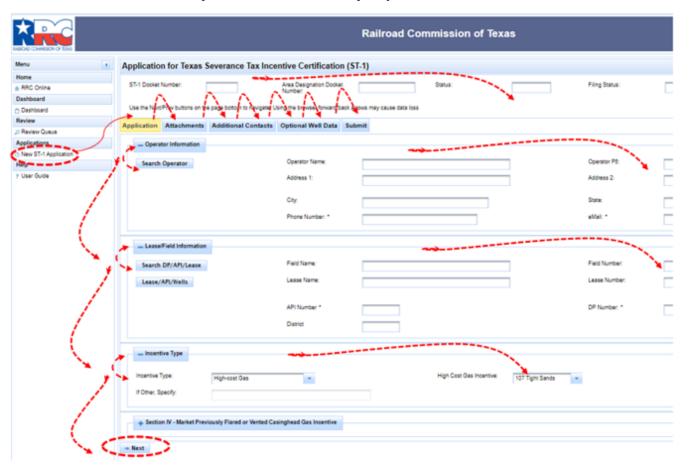
- The User Dashboard displays all dockets filed during the current log-in session:
- Dockets can be searched and filtered
- Left-hand navigation bar allows operators to access their dashboard and file new ST-1 applications



ST-1 Online Application Controls



- Data is entered from Top to Bottom, Left to right
- Toggle from the Left Tab to the Right Tab
 - Call the GAU if you have any questions 512-463-2741



ST-1 Entry – Operator



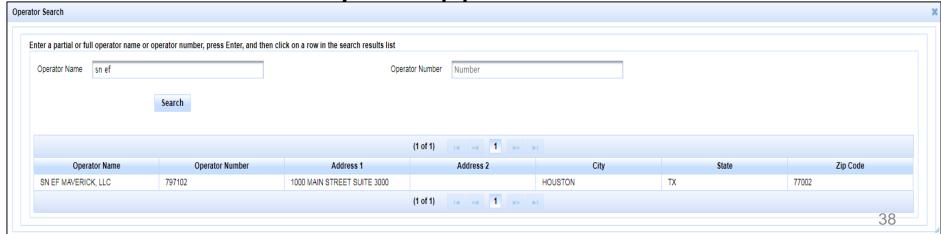
Application for Texas S	everance Tax Incentive Cer	tification (ST-1)						
ST-1 Docket Number:	Area Designation Docket Number:	Status:		Filing Status:	Fling	Type: New Applicati	on Submitted Date:	06/07/2019
Use the Next/Prev buttons on the	page bottom to navigate. Using the brows	er forward/back arrows may cause data loss						
Application Attachments	Additional Contacts Optional V	Vell Data Submit						
Operator Information								
Search Operator	Operator Name:			Operator P5:				
	Address 1:			Address 2:				- 1
	City:		1	State:			Zip:	
	Phone Number: *			eMail: *				I
	011000 HB01044-0100 HB0104-1							
_ Lease/Field Information								
Search DP/API/Lease	Field Name:			Field Number:				
	Lease Name:			Lease Number:				
	API Number *			DP Number: *				
	District							
_ Incentive Type								
Incentive Type: High	n-cost Gas	High Cost Gas	107 Tight Sands	-	Area De	esignation		
If Other, Specify:		Incentive:			Docket			

Operator and Lease/Field Information is entered by clicking the search buttons at the left.

ST-1 Entry Search Operator



- Operator P-5 information pulls directly into your application.
- Phone number and email are entered separately.
- Operator Name can be searched with partial information
- Clicking a result will automatically port that information into your application.



ST-1 Entry – Lease/Field Search





 Same as operator search, partial queries will return results for the name field.

 It is recommended to limit queries to one search parameter.

Indicate the ST-1 Incentive Type



Application	n for Texas S	Severance Tax Incenti	ve Certificatio	n (ST-1)							
ST-1 Docket N	Number:	Area Designa Docket Numb	tion er:	St	atus:		Filing Status:	Filing Type:	New Application	Submitted Date:	06/07/2019
Use the Next/	Prev buttons on the	e page bottom to navigate. Using	the browser forward/b	ack arrows may ca	ause data loss						
Application	Attachments	Additional Contacts Op	otional Well Data	Submit							
_ Operat	tor Information										
Search	Operator	Operator Na	ame:				Operator P5:				
		Address 1:					Address 2:				
		City:					State:			Zip:	
		Phone Num	ber: *				eMail: *				
Lease/	Field Information										
Search	DP/API/Lease	Field Name					Field Number:				
		Lease Nam	e:				Lease Number:				
		API Numbe	r ·				DP Number: *				
		District									
_ Incenti	ive Type										
Incentive T	ype:	ph-cost Gas	~	н	ligh Cost Gas	107 Tight Sands	-	Area Designation			
If Other, Sp	1 1/2	pri-cost Gas		Ir	ncentive:	107 Fight Sands		Docket: *			
ii otiici, op											

 Select appropriate category from drop-down menus, and manually enter Area Designation Docket Number. Use next button at bottom of screen to proceed.

ST-1 Attachments (1 of 2)



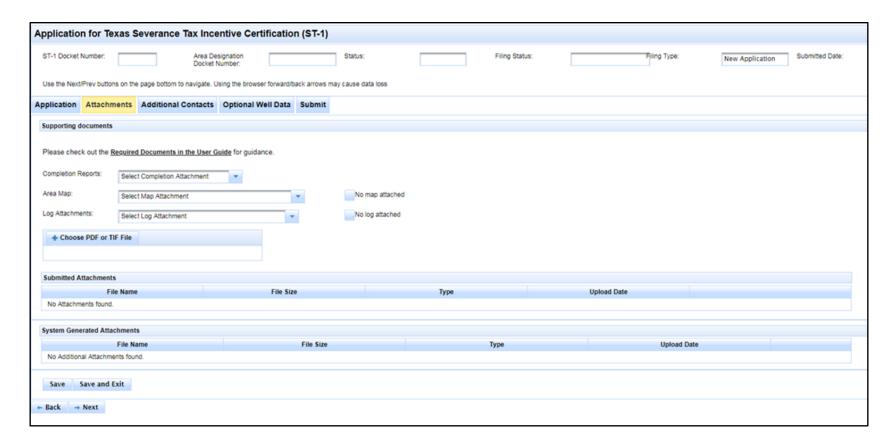
Each application requires a current form G-1

 Supplemental attachments include a map showing location of well inside an approved Tight Gas Designated Area & correlation well log(s). Accepted Formats: .LAS, .TIF (Prefer .LAS)

ST-1 Attachments (2 of 2)



 For Horizontal Wells an "As-Drilled" Geosteering Screenshot showing the wellbore position within the Tight-Gas Designated Interval greatly expedites the ST-1 review process.



ST-1 Entry – Optional Well Data



_ Option	nal Well Informatio	n							
The follow	ing information is on	otional. Providing it v	will facilitat	e processin	g the app	lication	:		
Is this well part of a stacked lateral?				Select Stacked Lateral					
If yes, par	ent well id:								
	ion in this well down er gas id (SWR10 E	Select	Commingle	d Well	*				
if yes, Cor	nmingled Well Id:								
		ions are within a tigl of the available ince		a Designati	on, Form	ST-1 fo	r each gas	s id must be file	
Reclass:			Select	Reclass	-				
Reclass D	ate:					î			
	rell been re-complet blugged back)?	ed (perforations	Select	Recompletion	on	*			
	e any previous com ing high cost gas?	pletions certified	Select	Previous Re	ecompletio	n	¥		

Information requested on this screen is optional.
 However, it may expedite completion of your application

Use your discretion.

ST-1 Entry – Submit Screen



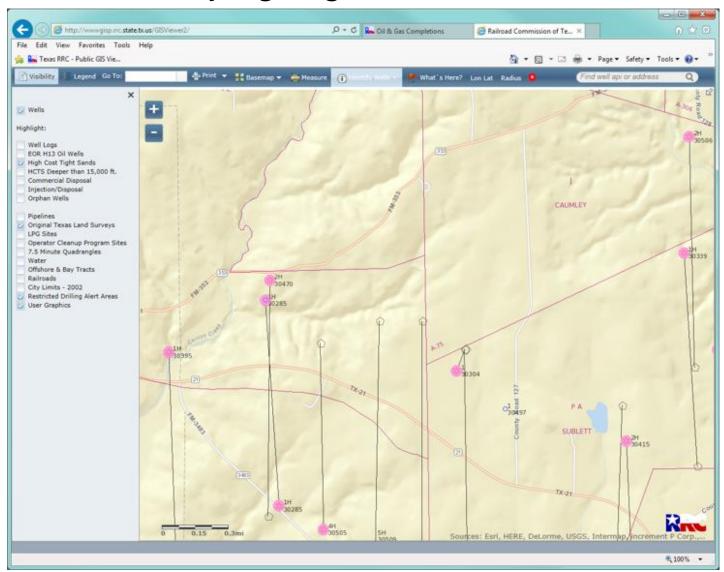
Application	Attachments	Additional Contacts	Optional Well Data	Submit						
Submit ST1 /	Submit ST1 Application									
	me or under my sup	-		this application, that this application was erein are true, correct and complete, to						
RRC Employ		aper ST-1 Application, please	e input stamped submission	n date: 06/07/2019						
Submit										
Save v Subn										
← Back										

- A new ST-1 Application can be saved while you are in the process of entering your information (from the attachments screen onward).
- An application cannot be deleted after it has been submitted.

Public GIS Map Viewer (1 of 3)



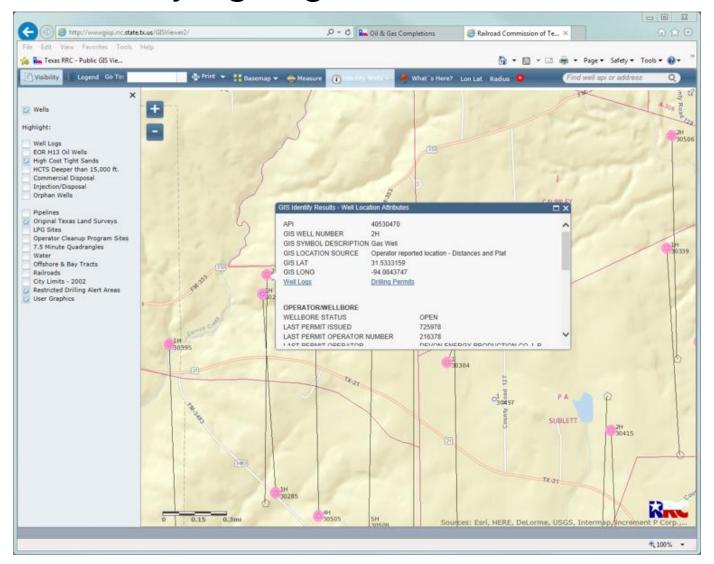
Identifying High Cost Gas Wells



Public GIS Map Viewer (2 of 3)



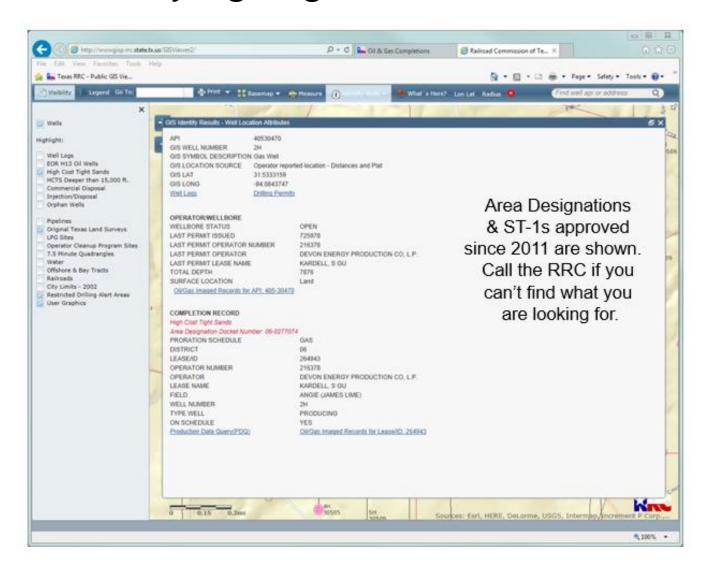
Identifying High Cost Gas Wells



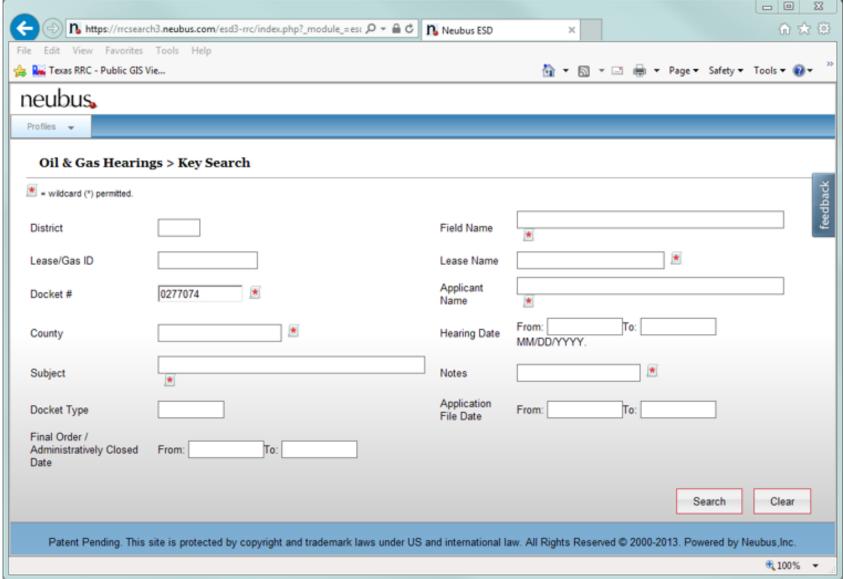
Public GIS Map Viewer (3 of 3)



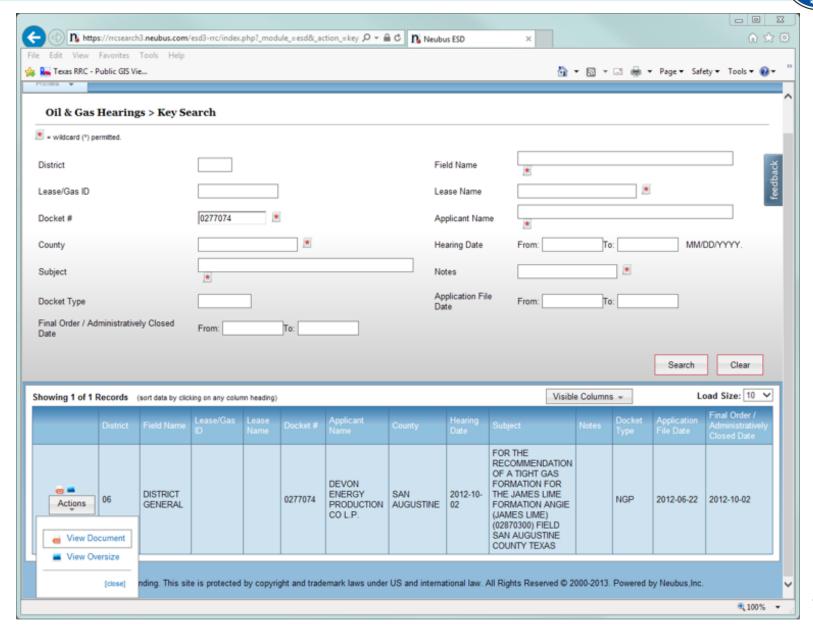
Identifying High Cost Gas Wells



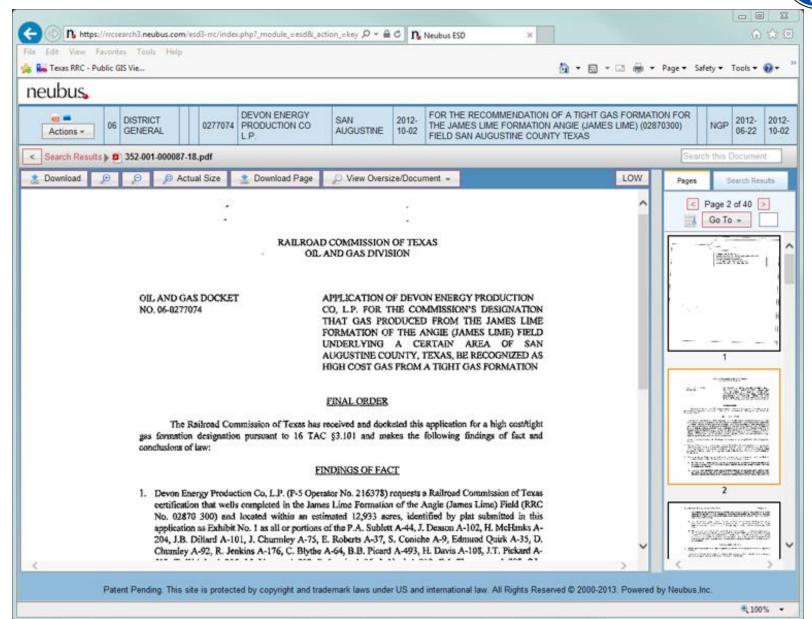
Neubus – Scanned Hearing Search (1 of 3)



Neubus – Scanned Hearing Search (2 of 3)



NeuDocs – Scanned Hearing Search (3 of 3)



Information Sources (1 of 3)



RRC Public GIS Map Viewer
 http://gis.rrc.texas.gov/GISViewer/

- RRC Online (NeuDocs)
 https://rrcsearch3.neubus.com/esd3 rrc/index.php? module =esd& action =keysearch&
 profile=11
 - Oil & Gas Imaged Records Menu...
 - Oil & Gas Hearing Files...
 - Docket Type: NGP

Information Sources (2 of 3)



Approved Tight Formation Listing
 https://www.rrc.texas.gov/oil-gas/publications-and-notices/publications/ogtightgas/

 Pre-existing severance tax exemptions at the Texas Comptroller's Office website https://mycpa.cpa.state.tx.us/cong

Information Sources (3 of 3)



 Template for Notice of Application for Area Designation

RRC Data - Online Research Queries
 https://rrc.texas.gov/about-us/resource center/research/online-research-queries/

Comptrollers Office



Kaila Thomas

Section Supervisor
Crude Oil & Natural Gas Section
Accounts Maintenance
Texas Comptroller of Public Accounts

- -512-936-8569
- -kaila.thomas@cpa.texas.gov

High Cost Gas Form AP-180



 AP-180, Request for Approval of Reduced Tax Rate for High Cost Gas

https://comptroller.texas.gov/forms/ap-180.pdf

 Information for Approval of Reduced Tax Rates for High Cost Gas Wells

https://comptroller.texas.gov/taxes/natural-gas/high-cost-wells.php

Information for AP-180 Approval Process

- A completed Form AP-180 (PDF) and copy of the certification letter from the Texas Railroad Commission must be submitted to the Comptroller's office.
- Actual drilling and completion costs for all certified high-cost gas wells must be included on Form AP-180.
- The Comptroller's office will send the taxpayer a letter acknowledging approval of the reduced tax rate for the certified high-cost gas well.
- After a high-cost gas well is approved, detailed information on the well is displayed on the Crude Oil and Natural Gas Web Inquiry System.

Additional Contact Information CPA

Crude oil and natural gas taxpayers: have questions about applications, data corrections or refund requests? Contact us for answers.

- Phone: 800-531-5441, ext. 3-4455
- Fax: 512-475-0165
- Email: <u>congtax@cpa.texas.gov</u> for general correspondence.
- Email: <u>cong.refunds@cpa.texas.gov</u> for refunds and transfers

Contacts

Area Designations & ST-1 Technical Permitting – GAU

- James Harcourt Manager
 - **-** 512-463-2980
 - james.harcourt@rrc.texas.gov
- Heather Hesskew Administrative Lead Reviews
 - **-** 512-463-3184
 - heather.hesskew@rrc.texas.gov
- Bryce McKee, P.G.— Technical Lead (Area Designations & ST-1 Reviews)
 - **-** 512-463-2259
 - bryce.mckee@rrc.texas.gov

Evaluation & Archive Video



Evaluation

 Please complete the evaluation available on the RRC website at https://survey.alchemer.com/s3/6403402/202
 1-RRC-Regulatory-Webinars-Oil-Gas-and-Pipeline-Safety-Evaluation

Archive Video

 A link to the archive video of the webcast will be available on the same webpage as the presentation.